

### Abstract

The present invention is directed to a method for identification of a Gram  
5 positive pathogenic bacterium comprising an amplification step with at least a first  
set of amplification primers capable of amplifying a preselected nucleic acid sequence  
region from a first predetermined sub-group of pathogenic Gram positive bacteria,  
and a detection step with at least a first hybridization reagent capable of specifically  
detecting a preselected nucleic acid sequence region from the first predetermined  
10 sub-group of pathogenic Gram positive bacteria, said detection step comprising steps  
monitoring whether hybridization has occurred at a preselected temperature, said  
occurrence of hybridization being indicative for at least the genus of a pathogenic  
organism present in the sample, and monitoring temperature dependence of  
hybridization, said temperature dependence being indicative for at least the species  
15 of the pathogenic Gram positive bacterium.